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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,433	03/01/2002	Hung Viet Ngo	C3043US;680-010481-US(PAR	3428
29683	7590	05/17/2004	EXAMINER	
HARRINGTON & SMITH, LLP 4 RESEARCH DRIVE SHELTON, CT 06484-6212			KANG, JULIANA K	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,433

Applicant(s)

NGO, HUNG VIET

Examiner

Juliana K. Kang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/3/03
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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1. Applicant's communication filed on February 9, 2004 has been carefully studied by the Examiner. The arguments advanced therein, considered together with the amendments made to the claims, are persuasive and the rejections based upon prior art made of record in the previous office action are withdrawn. In view of further search, however, and the consequent discovery of a previously uncited prior art document, a new rejection is applied to the pending claims. The late discovery of the newly applied reference is sincerely regretted. This action is not made final.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-41 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,607,303 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because it would have been obvious to the ordinary skilled person in the art at the time the invention was made to

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modify the device described in claims 1-41 of U.S. Patent No. 6,607,303 B2 to include a row of multiple optical fibers, twist boot or door. Having a plurality of fibers is known in the art to transmit more signals, having a twist boot is known in the art to protect the fibers from pulling and breaking at the connector end, and having a door mounted at the end of the housing is known in the art to protect users eyes and to protect the fiber ends. Thus, adding these known elements in the art to U.S. Patent 6,607,303 B2 would have been obvious to one having ordinary skill in the art to transmit more signals, protect the fibers from pulling and breaking and to protect the users eyes and to protect the fiber ends.

Claim Rejections - 35 USC § 103

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. **Claims 1-5, 8-16, 18-21, 23-27, 29-33 and 35-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth et al (U.S. Patent 6,508,593 B1) and further in view of Cabalka et al (U.S. Patent 6,146,192).**

Regarding claims 1-5, Farnsworth et al teach an optical connector adapter mount for mounting optical connectors to a panel (10), the mount comprising a tubular housing section with an aperture adapted for connecting different types of optical connectors including MTP wherein the aperture in the housing and the housing itself are angled relative to a normal axis of the panel. Farnsworth et al further show a hole (12) in the panel and the housing section extending through the hole in the panel (see Figs. 1, 3 and 5). Farnsworth et al teach latches (18)

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for mounting the housing to the panel. However, Farnsworth et al do not teach the claimed mounting section. Cabalka et al teach using angled mounting connector system having mounting sections (92, 94) that get fastened to the panel. Using fasteners instead of latches would provide securer fastening.

Thus, using the mounting sections of Cabalka et al in Farnsworth et al would have been obvious to one with ordinary skill in the art at the time the invention was made to secure the mount/housing to the panel with improved fastening.

Farnsworth et al also do not explicitly teach a multi-fiber optical connector. Since Farnsworth et al teach a universal receptacle housing for differently configured optical connectors, using a multi-fiber optical connector would also have been obvious to one with ordinary skill in the art.

Regarding claims 9-13 and 18, as describe above, Farnsworth et al and Cabalka et al teach the claimed invention. In addition, when Farnsworth et al and Cabalka et al's mount is mounted to the panel along with optical fibers, the optical fiber would inherently have a generally twisted shape since the optical fiber have a relatively long length and would be hang downwardly. This also inherently teaches fibers at a first location (near the panel) having a first axis (angled respect to the panel) and a second location (away from the panel) having a second axis (generally parallel to the panel). Two axes that are not parallel would certainly cross over each other.

Regarding claims 8, 14-16, as described above, Farnsworth et al and Cabalka et al teach the claimed invention except a twist boot. It is well known in the art to use a flexible twist boot to protect the fibers from the stress. Thus, it

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would have been obvious to one with ordinary skill in the art at the time the invention was made to use a twist boot in Farnsworth et al and Cabalka et al to protect the optical fibers from stretching or breaking.

Regarding claim 39, as described above, Farnsworth et al and Cabalka et al teach the claimed invention including a pair of inner adapter housing located in the aperture (passage) for locking a pair of opposing optical connectors (see column 2 lines 58-60 and Fig. 2).

Regarding claims 29-32, 35, 36 and 38, as described above Farnsworth et al and Cabalka et al teach the claimed invention including a door pivotally mounted to the housing (20) and a pair of latch inserts (24) having spring arms (30) connected to the one piece housing (column 2 line 48) and inserted into the housing wherein the corresponding connectors are locked within guide channels (see column 3 lines 1-20).

Regarding claim 33, as described above Farnsworth et al and Cabalka et al teach the claimed invention except the housing made of metal. Metal is well known material used in the art for optical connector housing because of its rugged physical strength for protect from physical stress. Thus, using metal in Farnsworth et al and Cabalka et al for the housing would have been obvious to better protection of the connectors.

Regarding claim 37, as described above Farnsworth et al and Cabalka et al teach the claimed invention except the door that is spring loaded. Farnsworth et al and Cabalka et al's door is raised or opened during the insertion of the adapter (see column 3 lines 24). A spring loaded door would automatically close

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when the adapter is unplugged. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a spring loaded door in Farnsworth et al and Cabalka et al in order to make the door shut automatically when the adapter is unplugged.

Regarding claims 19-21 and 23-27, as described above Farnsworth et al and Cabalka et al teach the claimed invention including an adapter, a flexibly twist boot and optical fibers that are generally twisted.

6. Claims 6, 7, 17, 28, 34, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth et al (U.S. Patent 6,508,593 B1) and Cabalka et al (U.S. Patent 6,146,192) and further in view of Szilagyi et al (U.S. Patent 6,305,961 B1).

Regarding claims 6, 7, 17, 28, 34 and 40, as described above, Farnsworth et al and Cabalka et al teach the claimed invention except an EMI gasket. Szilagyi et al teach using an EMI gasket around a mating portion of a connector in an optical fiber connector assembly to prevent leakage of EMI at the interface of optical connections. Also placing the EMI gasket in a recess would provide a tighter fitting. Thus it would have been obvious to one having ordinary skill in the art at the time the invention was made to use an EMI gasket in a recessed mounting section at an interface of the mounting section and panel in Farnsworth et al and Cabalka et al to provide an improved EMI leakage protection.

Regarding claim 41, Farnsworth et al teach a door (20) pivotally mounted to the housing.

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7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farnsworth et al (U.S. Patent 6,508,593 B1) and Cabalka et al (U.S. Patent 6,146,192) and further in view of Mayercik et al (U.S. Patent 6,461,053 B1).

As described above Farnsworth et al and Cabalka et al teach the claimed invention except the fibers placed in a cable having unsymmetrical cross-section.

Mayercik et al teach a plurality of optical array connectors having an unsymmetrical cross-section (one row of fibers) in Fig. 6. Having such fiber configuration of Mayercik et al in Farnsworth et al and Cabalka et al would have been obvious to one having ordinary skill in the art for easier handling of a plurality of optical fibers.

Conclusion

8. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.


9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Gonzalez et al (U.S. Patent 6,496,642 B2), Erwin et al (U.S. Patent 6,674,951 B1), Childers et al (U.S. Patent 6,134,370) and Waldron et al (U.S. Patent 6,634,801 B1) teach a twist boot in an optical fiber connection. Erdman et al (U.S. Patent 6,027,252) teach an optical fiber adapter having a single piece housing with a flange to mount the housing to a panel.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juliana K. Kang whose telephone number is (571) 272-2348. The examiner can normally be reached on Mon. & Fri. 10:00-6:00 and Tue. & Thur. 10:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rod Boavernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Juliana Kang
May 8, 2004